IGNITES

Calculating NAV Is Hard. More Funds Got It Wrong in 2022

The number of funds reporting net asset value errors increased by double-digits last year compared to 2021, according to an Ignites analysis.

By Sonya Swink, Greg Saitz | March 3, 2023

Applying an incorrect foreign tax liability adjustment. Information not being sent from a service provider to the transfer agent. Recording a total return swap in U.S. dollars instead of Brazilian reais.

Calculating the daily net asset value of a fund can go wrong in many ways.

Over the past two years, the process failed hundreds of times at funds with \$342 billion in assets, according to an Ignites analysis of fund disclosures. During the first 10 months of 2022, those responsible for striking NAVs seriously bungled the process almost 130 times, an 18% increase from the same period in 2021, the analysis finds.

The number of fund shops reporting such mistakes increased even more, by over 29%.

More Volatility, Fewer Staff Members

METHODOLOGY

For this analysis, Ignites sought to determine how many mutual funds disclosed mistakes in calculating their net asset values in the past two years.

Although the Securities and Exchange Commission has not defined what constitutes a material net asset value error, the commission and fund industry generally rely on a threshold of \$0.01 per share or 0.5% of NAV, disclosures show. The SEC uses a slightly different standard when requiring open-end funds to disclose such issues on Form N-CEN: whether the NAV calculation error required shareholders to be repaid or their accounts reprocessed.

To determine the extent of funds reporting these errors, Ignites reviewed thousands of N-CENs for products with fiscal years that ended between Jan. 31 and Oct. 31 in both 2021 and 2022. Funds with 2022 fiscal year ends of Nov. 30 and Dec. 31 had not filed their N-CENs at the time Ignites performed the review.

Funds that appeared in multiple N-CENs as having a NAV error were counted only once unless Ignites could verify the disclosures referred to distinct miscalculations.



Upheaval in geopolitical markets after Russia invaded Ukraine and the rise of complicated structures with illiquid investments left funds even more exposed to potential NAV errors, some consultants said.

"Market volatility increases the consequences of triggering the reporting. Subsequent to the Russia invasion of Ukraine, the markets went way down," said Robert Zutz, a partner at K&L Gates.

"The frequency of days moving one, two, three percent a day, those larger price movements could have caused a deviation and harm," Zutz said.

Another possible contributor is the industry's ongoing talent shuffle. Longtime fund accountants and others who work on calculating the NAV might have retired or left their firms in the last year, consultants said.

"Any time there's turnover within operations, including fund accounting, there is opportunity for error," said Andrew Elko, a director with consulting firm Alpha FMC. "It can go unnoticed over time. ... Even auditors sometimes miss it."

Documenting Discrepancies

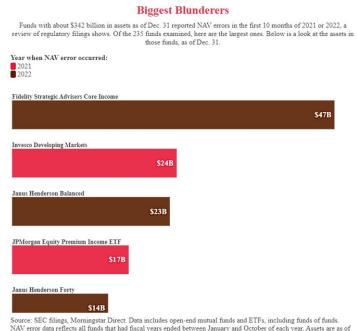
Open-end funds report on Form N-CEN the NAV errors that required shareholders to be repaid or their accounts reprocessed.

In the 2022 period examined, some 129 funds reported NAV restatements to the Securities and Exchange Commission, an increase of 20 funds compared to the year prior, Ignites' analysis found.

The year-over-year change would have been three times greater had it not been for Principal Funds reporting 2021 NAV miscues in 29 of its funds, 24 of them target-date products. A Principal spokesperson did not respond to requests for comment.

Dozens of complexes including Allspring, Fidelity and Invesco, as well as turnkey multiple series trusts and shops like Old Westbury Funds reported NAV errors in funds with fiscal year ends between Jan. 31, 2022, and Oct. 31, 2022, filings show.

Old Westbury's \$2.3 billion Credit Income fund had a NAV error, as did Invesco's \$1.1 billion Global Allocation Fund. Multiple funds in T. Rowe Price's and Allspring's retirement and target-date funds did, too.



Source: SEC filings, Morningstar Direct. Data includes open-end mutual funds and ETFs, including funds of funds. NAV error data reflects all funds that had fiscal years ended between January and October of each year. Assets are as of Dec. 31 except for 11 funds not available in Morningstar Direct. In these cases, assets are as of most recent 2022 filing. Graphic: Adrian D. Garcia, Ignites

So did Payden & Rydel's \$29.9 million Emerging Markets Local Bond Fund and nearly a dozen GMO products, according to disclosures.

A fund accounting error led to incorrect NAVs for a day at T. Rowe, according to a company spokesperson. The firm reported that about a third of the 42 funds in its retirement and target-date suites published the wrong NAV in the fiscal year ended last May.

"Since then, operational actions have been put in place to mitigate the risk of any similar error in the future," the spokesperson wrote in an email.

Striking a NAV is a complicated, daily dance that can require coordination across systems, firms and countries.

Getting it wrong can draw scrutiny from businesses and regulators as well as require thousands in repayments to investors.

Error Prone
Nearly 70 fund groups reported NAV errors for their mutual funds and ETFs during the first 10 months of 2021 and 2022, data shows. Below is a look at the complexes with the most errors for the combined 20-month period.
Funds with NAV Errors by Complex 2021 2022
Principal
30 7
Invesco
9 12
T. Rowe Price
14
Fidelity
6 7
Allspring
2 11
Source : SEC filings. Data includes open-end mutual funds and ETFs, including funds of funds. Data is as of fiscal years ending Oct 31. Some funds reported NAV errors in both years. The analysis only counted those funds once, in 2021, unless Ignites could verify there were two distinct errors. Graphic: Adrian D. Garcia. Ignites

A series of NAV errors could inflate fund returns from say, 4% to 6%, Elko said. Once seen by investors, "it creates a false narrative, and there's implications for that," he said.

One of the biggest repercussions is having to repay the fund, he said. A firm's reputation can also suffer.

Paying the Price

Fund groups aren't required to provide NAV error details on Form N-CEN, but specifics sometimes emerge in other filings.

In the annual report for the Fulcrum Diversified Absolute Return Fund, for example, the fund's outside auditor, BBD, said a material weakness in the fund's internal controls caused a NAV error. The \$251 million fund overvalued a forward exchange contract during the fiscal year ended June 30, 2022, forcing it to lower the NAV by 6 cents a share, the report states.

Fund administrator U.S. Bank Global Fund Services repaid the fund \$63,642, the filing shows.

It wasn't the first time the Fulcrum fund, which operates inside the U.S. Banksponsored Trust for Advised Portfolios, reported problems with its NAV. The fund also botched calculations in 2021 and 2020, filings show.

The 2021 error occurred after it recorded a total return swap in U.S. dollars instead of Brazilian Reais, according to an Oct. 13, 2021, letter responding to the SEC's request for more detail about what happened. The mistake, which was corrected the next day, caused the fund to understate its NAV by \$786,510, or 8 cents a share, the letter shows.

Last year's NAV error appears more substantial.

One investor wrote on an online message board that he sold Fulcrum fund shares in July, only to have brokerage firms reprocess those sales in September and claw back several hundred dollars from him.

The former shareholder got money back after complaining to the SEC. The investor posted to the message board of MutualFundObserver.com what he said was the SEC's response. "U.S. Bank Global Fund Services made an accounting error in the Fulcrum Diversified Absolute Return Fund from June 9, 2022, until August 30, 2022," the SEC wrote, according to the shareholder's post. "As a result, the net asset value of each share class of the fund were redetermined for the period."

A spokesperson for U.S. Bank, which also is the fund's custodian and transfer agent, declined to comment on "a client's NAV error."

Advisor Fulcrum Asset Management also declined to comment, as did the SEC.

Keeping a Symphony Playing

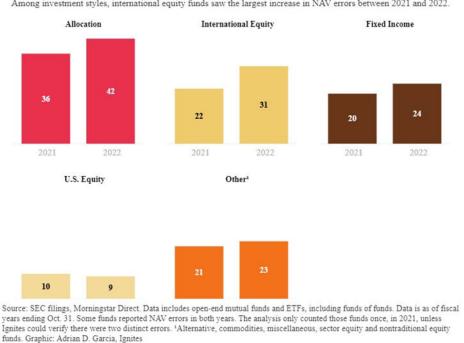
Calculating a NAV is intricate. The final figure is the product of multiple steps throughout the day.

The process is like pulling off a large-scale musical performance, said Matt Grinnell, global head of product for risk, oversight and compliance at Linedata.

Most funds start calculations as soon as redemptions begin, accounting for income, expenses, fees and corporate actions, he said.

Nearly all funds set their NAVs within a few hours after exchanges close. Valuations must be accomplished quickly, usually within two hours of market close, according to a K&L Gates' procedure letter.

But pulling in all that information, sometimes from global sources, can increase the chances of an error.



Slip-ups by Style

Among investment styles, international equity funds saw the largest increase in NAV errors between 2021 and 2022

"There's a lot of bodies sitting at desks and handoffs of that data from the manager, from vendors providing information," Grinnell said.

People at fund administrators and custodians are akin to musicians who must make the music work in harmony, he said.

"At the end of the day, it's all a great symphony – and the NAV comes out," Grinnell said.

That process usually works. But if someone hits a wrong note along the way, it can lead to an error that isn't caught.

The Regulatory Gaze

When NAV errors happen and are reported on the N-CEN, regulators sometimes ask about them.

SEC disclosure review examiners asked dozens of funds over the past three years for more details about what went wrong and if they made changes to prevent another issue, according to a review of letters filed with the agency.

For example, a Franklin Templeton affiliate repaid the \$27 million International Small Cap Fund \$54,272 during its fiscal year ended July 31, 2021, for losses from a NAV error, according to an annual report. That repayment was significantly less than the \$485,005 that affiliates of the San Mateo, California-based firm handed over to the fund in fiscal 2020 for a separate NAV mistake.

In a June 3 letter to the SEC, the fund group said errors in funds occurred after a third-party service provider did not send NAV revisions to the transfer agent.

Another fund, the \$927 million Franklin Gold & Precious Metals Fund, did not report a NAV mistake on its N-CEN in 2021, but disclosed in its annual report that an affiliate paid it \$27,191 in fiscal year 2021 to correct a NAV error.

Automation to the Rescue?

To minimize errors, some firms are trying to reduce the level of worker involvement. Major asset servicer State Street has already eliminated up to 80% of some of its manual work needed to verify NAV calculation accuracy against benchmarks, Chief Information Officer Brian Franz said in a presentation last June.

Two years ago, BNY Mellon acquired Milestone Group to help automate some NAV and fund accounting processes. And SS&C's Lyric platform and one from Northern Trust have added robotics to their fund accounting processes.

At the end of the day, however, even those systems cannot always steady complicated funds' NAVs, consultants said. Computers can process information but don't analyze each detail, said Alpha FMC's Elko.

If "an individual makes a mistake, an error occurs," he said. "There's always going to be a human component associated with it."